REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated February 2, 2006. Applicants respectfully thank the Examiner and the Supervisory Patent Examiner for their consideration in having conducted a personal interview with the Applicants' representatives on April 18, 2006.

In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due consideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 21-36 are under consideration in this application. Claims 1-20 are being canceled without prejudice or disclaimer, while new claims 21-36 are hereby submitted for consideration, in order to more particularly define and distinctly claim applicant's invention. Support for the new claims may be found throughout the specification, including Figures 2 and 3, and the corresponding descriptions on pages 13-21. Applicant hereby submits that no new matter is being introduced into the application through the submission of this response.

Formal Rejection

Claims 4-5 and 14-15 were rejected under 35 U.S.C. §112, second paragraph, for being indefinite. As claims 1-20 are being canceled, this rejection is hereby rendered moot.

Prior Art Rejections

Claims 1-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US Pat. App. Pub. No. 2004/0054939 A1 to Guha et al. (hereinafter "Guha"). This rejection has been carefully considered, but is most respectfully traversed.

In contrast to the present invention as discussed during the Examiner Interview, Guha merely discloses a conventional structure for a controller 30 to operate a plurality of individual disk drives in a RAID-type storage system, where the disk drives are selectively powered on in order to reduce power consumption (see Abstract, paragraphs [0050] – [0052]).

Guha falls far short of rendering obvious the combination of a channel adapter which is operatively coupled to a computer, provides upper logical volumes for the computer and receives data which is sent from the computer to the upper logical volumes; a memory which

is operatively coupled to the channel adapter and stores the data sent from the computer and configuration information with respect to a configuration of the storage control device; a disk adapter which is operatively coupled to the channel adapter and the memory, controls reading and writing of the data from/to the memory and provides inner logical volumes at least one of which is mapped to a one of the upper logical volumes, the inner logical volumes being used as storing regions for transmission and reception of the data between the channel adapter and the disk adapter; and a plurality of disk drives, which are operatively coupled to the disk adapter, in which the data sent from the computer are written by control of the disk adapter as a data group, wherein at least a first inner logical volume of the inner logical volumes is mapped to a first upper logical volume of the upper logical volumes and is mapped to a first set of disk drives in the plurality of disk drives, a second upper logical volume of the upper logical volumes is used by the computer for control the storage control device and is utilized when the configuration information in the memory is read by the computer, the channel adapter receives a command including a change-over instruction, which includes information identifying a second inner logical volume of the inner logical volumes, from the computer sent for the second upper logical volume, and the channel adapter maps the second inner logical volume instead of the first inner logical volume to the first upper logical volume in response to the change-over instruction issued from the computer to the second upper logical volume and operates to start a second set of disk drives in the plurality of disk drives mapped to the second inner logical volume, as recited in claim 21.

Guha also falls short of rendering obvious the combination of an interface coupled to the computer; a plurality of disk drives; a plurality of upper volumes for the computer ; and a plurality of inner volumes which are mapped to the plurality of disk drives, wherein a first upper volume of the plurality of upper volumes is mapped to a first inner volume of the plurality of inner volumes so as to access the first inner volume by the computer, wherein, in response to the interface receiving an access command from the computer for accessing the first upper volume of the plurality of upper volumes, the first inner volume mapped to the first upper volume is accessed by the computer via the first upper volume, and wherein the first upper volume is mapped to a second inner volume of the plurality of inner volumes instead of the first inner volume in response to receiving an instruction from the computer to assign the second inner volume to the first upper volume such that the second inner volume is accessed by the computer via the first upper volume in response to receiving the access command at the interface for accessing the first upper volume, as recited in claim 31.

As such, the present invention as now claimed is distinguishable and thereby allowable over the rejection raised in the Office Action. The withdrawal of the outstanding prior art rejection is in order, and is respectfully solicited.

Conclusion

In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and phone number indicated below.

Respectfully submitted,

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